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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/605,920

11/06/2003

Yao-Der Huang

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03/09/2007

BERKELEY LAW & TECHNOLOGY GROUP, LLP

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SUITE 240

BEAVERTON, OR 97006

EXAMINER

RUDE, TIMOTHY L

ART UNIT

PAPER NUMBER

2871

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/605,920

Applicant(s)

HUANG ET AL.

Examiner

Timothy L. Rude

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claims***

Claims 1-6 are amended. Claims 7-20 are canceled by Applicant. Applicant argues the amendments do not narrow the scope of the amended claims.

### ***Specification***

The specification is amended. Objection to the disclosure is withdrawn.

### ***Claim Objections***

Objections to claims 4-6 are withdrawn.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasagawa et al (Sasagawa) USPAT 6,454,452.

As to claim 1, Sasagawa discloses a light guide plate structure [back light device, entire patent, e.g., Figures 1-2B] comprising:

a light guide plate, comprising at least one light incident surface, a light scattering surface, 24, and a light emitting surface, top, wherein the light incident surface, 20, is on a sidewall of the light guide plate, the light scattering surface is on a bottom surface of the light guide plate, the light emitting surface is on a top surface of the light guide plate, wherein the light scattering surface has a plurality of notches; and a plurality of transparent element structures [air, scope of "element structures" is equivalent to "elements" per Applicant's response of 30 October 2006], disposed within the plurality of notches, wherein a reflective index of the plurality of transparent element structures is different from that of the light guide plate. Please note that the term structure can reasonably be considered to mean configuration, form, shape, etc. Furthermore, air is a substance that has an index of refraction. The structures would perform differently if the assembly were immersed in an alternate gas or gas mix having a different index of refraction or color. The mere fact that these structures are made of air structured by the boundaries of the notches does not diminish their significance.

FIG. 1

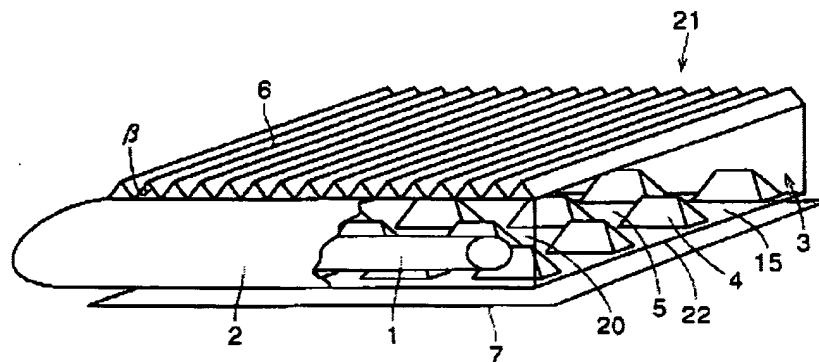


FIG. 2A

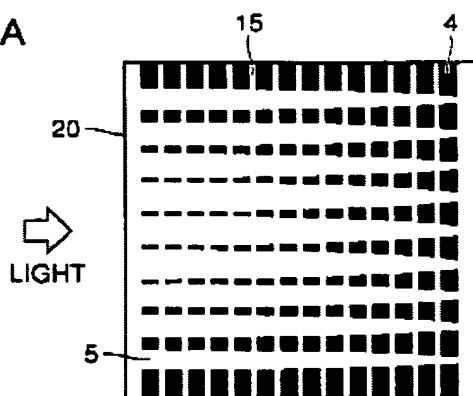
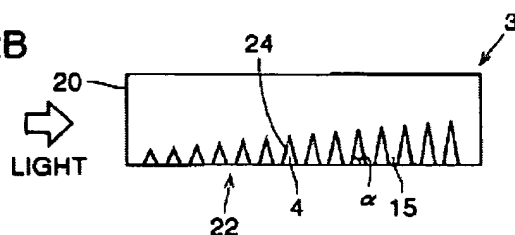


FIG. 2B



As to claim 3, the light guide plate structure of claim 1, wherein the light guide plate is a mesa light guide plate, the plurality of transparent elements have different sizes, the plurality of transparent element structures are disposed on the light scattering

surface at least partially in sequence by the size, and bottom surfaces of the plurality of transparent element structures are substantially coplanar [Fig. 2B].

As to claim 4, Sasagawa discloses a back light guide for a display [back light device, entire patent, e.g., Figures 1-2B] comprising:

a light guide plate structure, comprising: a light guide plate, comprising at least one light incident surface, 20, a light scattering surface, 24, and a light emitting surface, top, wherein the light incident surface is on a sidewall of the light guide plate, the light scattering surface is on a bottom surface of the light guide plate, the light emitting surface is on a top surface of the light guide plate, and wherein the light scattering surface has a plurality of notches, a plurality of transparent element structures, air, disposed within the plurality of notches, wherein a reflective index of the plurality of transparent element structures is different from that of the light guide plate; and a linear light source next to the light incident surface of the light guide plate.

As to claim 6, the back light of claim 4, wherein the light guide plate is a mesa light guide plate, the plurality of transparent element structures have different sizes, the plurality of transparent element structures are disposed on the light scattering surface at least partially in sequence by the size, and bottom surfaces of the plurality of transparent element structures are substantially coplanar [Fig. 2B].

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasagawa in view of Pelka et al (Pelka) USPAT 6,647,199 B1.

As to claims 2 and 5, Sasagawa discloses the light guide plate structure of claims 1 and 4 above.

Sasagawa does not explicitly disclose a display wherein the plurality of transparent element structures comprises a glass or an acrylic material.

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Pelka teaches that use of acrylic is known to be a preferred material for use in the making of light guide plates [col. 6, lines 26-36] and Pelka teaches that transparent scattering element structures can be made of any transparent material that has an index of refraction different from that of the light guide [col. 9, lines 28-32].

Pelka is evidence that workers of ordinary skill in the art would find the reason, suggestion, or motivation to add a plurality of transparent element structures comprising a glass and/or an acrylic material as art recognized equivalents for the same purpose of forming transparent scattering element structures with satisfactory performance in a back light device [MPEP 2144.06].

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Sasagawa with the plurality of transparent element structures comprising a glass and/or an acrylic material of Pelka as an art recognized equivalents for the same purpose of forming transparent scattering element structures with satisfactory performance in a back light device.

### ***Response to Arguments***

Applicant's arguments filed on 30 October 2006 have been fully considered but they are not persuasive.

Applicant's ONLY substantive arguments are as follows:



(1) Regarding base claims 1 and 4, Sasagawa does not disclose transparent element structures [scope of “element structures” is equivalent to “elements” per Applicant’s response of 30 October 2006].

(2) Regarding claims 2 and 5, Pelka does not cure Sasagawa.

(3) Dependent claims are allowable because they directly or indirectly depend from an allowable base claim.

Examiner’s responses to Applicant’s ONLY arguments are as follows:

(1) It is respectfully pointed out that the term structure can reasonably be considered to mean configuration, form, shape, etc. Furthermore, air is a substance that has an index of refraction. The structures of Sasagawa would perform differently if the assembly were immersed in an alternate gas or gas mix having a different index of refraction or color. The mere fact that these structures are made of air structured by the boundaries of the notches does not diminish their significance.

(2) It is respectfully pointed out that there is no deficiency in Sasagawa. Also, Pelka does add solid structures (not gaseous). What would Applicant find deficient about Pelka ?

(3) It is respectfully pointed out that in so far as Applicant has not argued rejection(s) of the limitations of dependent claim(s), Applicant has acquiesced said rejection(s).

Any references cited but not applied are relevant to the instant Application.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L. Rude whose telephone number is (571) 272-2301. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



tlr

Timothy L Rude  
Examiner  
Art Unit 2871



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